VIA ELECTRONIC MAIL

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RE: Sierra Club and Earthjustice Comments on Louisiana Department of Environmental Quality's Proposed State Implementation Plan ("SIP") for Regional Haze Program, Electrical Generating Units BART Analysis [LDEQ 1607Pot1 (Oct. 20, 2016)]

Dear Ms. Aucoin:

Please accept these comments submitted on behalf of Sierra Club and Earthjustice regarding the Louisiana Department of Environmental Quality's ("LDEQ's") proposed State Implementation Plan ("SIP") for the Clean Air Act Regional Haze Program, Electric Generating Units BART Analysis (proposed October 20, 2016).[1] The proposal is intended to address the U.S. Environmental Protection Agency's ("EPA's") 2012 partial disapproval of the 2008 Louisiana Regional Haze SIP for, among other things, relying on the now-invalid Clean Air Interstate Rule ("CAIR") as an alternative to conducting source-specific "Best Available Retrofit Technology" determinations for sulfur dioxide ("SO_2") and nitrogen oxide ("NOx") emissions from electric generating units ("EGUs"). 77 Fed. Reg. 33641 (June 7, 2012) (final disapproval of SIPs relying on CAIR in lieu of BART); *see also* 77 Fed. Reg. 39425 (July 3, 2012) (final disapproval of Louisiana regional Haze SIP). We incorporate by reference and are attaching the comments submitted by Earthjustice, National Parks Conservation Association, and the Sierra Club regarding EPA's development of the Cross State Air Pollution Rule ("CSAPR") BART exemption rule—also known as the "Better than BART" rule.[2]

[1] Although the original notice for this proposal included a November 30, 2016 comment deadline, LDEQ extended the deadline until December 14, 2016. These comments address only the BART analysis proposed on October 20, 2016. LDEQ has issued a separate notice inviting comment on the BART analysis for Entergy's R.S. Nelson facility.

[2] *See* Exs. 1 & 2, Letter from McCrystie Adams & Michael Hiatt, Earthjustice to EPA, EPA Docket ID EPA-HQ-OAR-2011-0729 (Feb. 28, 2011); Supplemental Letter from McCrystie Adams & Michael Hiatt, Earthjustice to EPA, EPA Docket ID EPA-HQ-OAR-2011-0729-0001 (Mar. 27, 2012).

As explained in detail below, we have serious concerns regarding LDEQ's proposed Regional Haze SIP revision for EGUs. First, the proposed source-specific BART analyses for Cleco Power's Rodemacher 2 and NRG's Big Cajun II are woefully inadequate, and LDEQ's proposed SIP fails to include any independent, critical review of the utilities' analyses. Given LDEQ's lack of analysis and its failure to include specific emission limits (and sufficient information to support those limits), EPA cannot approve the SIP revision. *See* 77 Fed. Reg. at 39429. Second, Louisiana's proposed reliance on the CSAPR Better than BART Rule for NOx emissions is unlawful. Finally, Louisiana's proposed SIP revision fails to satisfy the Regional Haze Program's Reasonable Progress requirements. In particular, the SIP fails to establish reasonable progress goals and fails to evaluate whether additional emission reductions from non-BART sources are necessary to ensure reasonable progress toward the Clean Air Act's visibility goal. As a result, LDEQ's SIP proposal is unlawful and cannot be approved by EPA.

I. LDEQ's Source-Specific BART Analyses for Sulfur Dioxide is Flawed.

We are concerned that LDEQ has accepted the BART analyses conducted by utilities without conducting any independent, critical review of the utilities' analyses. It appears from the record that EPA Region 6 has expressed numerous concerns with the utilities' analyses, but we have not found any reviews conducted by LDEQ.[3] LDEQ has a legal obligation to submit a SIP that complies with the Clean Air Act, regardless of what a utility advocates for in a BART analysis. As explained, below, aspects of the BART analysis for Rodemacher 2 and Big Cajun II Unit 1 do not comply with applicable Clean Air Act requirements.

In particular, the SO_2 BART limits for Rodemacher 2 should be based on the use of a wet scrubber. Also, LDEQ should clarify what, exactly, it is proposing for SO_2 BART for Big Cajun II Unit 1. It is unclear whether the Department is proposing that the unit is subject to BART or is not subject to BART. It is also unclear whether the limits in the Administrative Order are BART or are used to screen the unit out of BART. Furthermore, any visibility modeling used to determine whether Big Cajun II is subject to BART must use 2000-2004 emissions as baseline emissions, and any limits used to screen out of BART or used as BART must be federally enforceable provisions of the SIP.

A. Rodemacher 2

For Rodemacher Unit 2, the record contains three BART analyses, all of which were prepared by Trinity Consultants, at the request of Cleco Power, the owner of the unit. The first two analyses used an equipment lifetime of 20 years for new scrubbers, which is significantly shorter than the standard 30-year equipment lifetime for new scrubbers.[4] Using a 20-year

[3] *See, e.g.*, Ex. 3, Letter from EPA Air Planning Chief Guy Donaldson to Firdina Hyman, Response to Deviations Request for Best Available Retrofit Applicability Screening Modeling (May 20, 2015).

[4] EPA has stated in multiple haze rulemakings that a 30-year life should be used for calculating costs for a new scrubber. *See, e.g.*, 80 Fed. Reg. 18,944, 18,955, 18,971, 18,993 (Apr. 8, 2015) (using a 30-year equipment lifetime for new scrubbers for BART and reasonable progress sources in the Arkansas regional haze rule); 79 Fed. Reg. 33,438, 33,444 (June 11, 2014) ("[W]e determined that 30 years is a reasonable and well founded estimate of the expected life of wet FGD systems."); *Oklahoma v. EPA.*, 723 F.3d 1201,

equipment lifetime, Trinity calculated a new wet scrubber to have an average cost-effectiveness of over $8,000, and an incremental cost-effectiveness of over $19,000. *See* Cleco, BART Five-Factor Analysis at 5-7 (Oct. 31, 2015). After EPA pointed out that it is standard practice to use a 30-year lifetime for new scrubbers, the costs declined dramatically, as expected; using a longer equipment lifetime provides a longer time period for amortizing costs. The third, and most recent, BART analysis found that a wet scrubber would have an average cost-effectiveness of approximately $5,500 per ton. Cleco, BART Five-Factor Analysis at 5-7, 5-10 (Apr. 18, 2016). A wet scrubber would improve visibility by 0.445 deciviews at Breton and by 0.322 deciviews at Caney Creek. *Id.* at 5-9 to 5-10.

A wet scrubber should be required as BART for Rodemacher 2. BART controls have been approved that have an average cost-effectiveness of more than $5,500 per ton. See 77 Fed. Reg. 31,691, 31,711 (May 29, 2012) and 77 Fed. Reg. 61,478, 61,506 (Oct. 9, 2012) (requiring SO2 BART controls with an average cost-effectiveness of $5,587, $5,583, and $5,583 for the Kanoelehua, Puna, and Shipman power plants). Other final BART determinations have been only slightly less expensive than the costs here. *See, e.g.*, approval of Colorado's SIP, 77 Fed. Reg. 18,052, 18,082, 18,084, 18,087 (Mar. 26, 2012), *and* 77 Fed. Reg. 76,871 (Dec. 31, 2012) (requiring NOx BART controls with an average cost-effectiveness of $4,887 for Craig Unit 3). Similarly, BART controls have been approved that would lead to equal, or less, visibility improvement than here.

Cleco's analysis devotes a mere one sentence to weighing the BART factors and selecting the controls for SO_2. Cleco, BART Five-Factor Analysis at 5-9 (Apr. 18, 2016). Cleco claims that because a scrubber would cost more, it "cannot be justified as BART." *Id.* This reasoning is irrational, because it considers costs without considering benefits. While the costs of a scrubber are higher, so, too, are the benefits: a wet scrubber has twice the visibility as enhanced DSI at Breton and nearly three times the visibility benefits as enhanced DSI at Caney Creek. *See id.* at 5-10 (enhanced DSI will improve visibility by 0.226 deciviews at Breton and 0.122 deciviews at Caney Creek, whereas wet FGD will improve visibility by 0.445 deciviews at Breton and 0.322 deciviews at Caney Creek).

LDEQ has not added any analysis of its own which justifies the rejection of a wet scrubber as SO_2 BART. LDEQ did not establish any threshold for cost-effectiveness or visibility improvement or provide any explanation of how to properly balance the five BART factors. Given that the record contains a single sentence from Cleco weighing the BART factors in an irrational manner, and no weighing of the BART factors by LDEQ, the record lacks any rational explanation of the rejection of a wet scrubber as BART.

Finally, it is troubling that, but for the suggestions from EPA, Cleco would have submitted a BART analysis that over-estimated the cost of wet scrubbers by more than forty percent. Given that LDEQ does not appear to have undertaken an independent, critical review of the BART analysis, we are concerned that the analysis may contain other flaws which bias the result against requiring more stringent controls.

1220 (10th Cir. 2013) (upholding EPA's decision, in the Oklahoma regional haze rule, to use of a 30-year useful life for new scrubbers).

B. Big Cajun II, Unit 1

We are unable to comment meaningfully on the BART proposal for Big Cajun II, Unit 1 because it is unclear exactly what LDEQ is proposing. The record contains multiple consultants' reports, one of which claims the unit is not subject to BART based on 2000-2004 emissions rates, while another report conducts a five-factor BART analysis using 2000-2004 as well as more recent emission rates. It is unclear which of these reports, if any, LDEQ is relying on. Moreover, it is unclear whether LDEQ is proposing to find that Big Cajun II Unit 1 is not subject to BART because of its baseline visibility impacts, or whether LDEQ finds that the unit is subject to BART, but that the limits in the Administrative Order represent BART, or something else. LDEQ should clearly state whether Big Cajun II, Unit 1 is subject to BART, and whether it has made a BART determination based on the five factors in the Clean Air Act. Like the state's 2008 Regional Haze SIP, this proposal also fails to identify specific, enforceable emission limits in the SIP itself, and the fails to include technical information sufficient to demonstrate compliance with the Regional Haze Rule. Consequently, the SIP revision cannot be approved as currently drafted. *See* 77 Fed. Reg. at 39429.

To the extent that LDEQ is proposing that the unit is not subject to BART, this appears to be based on an updated emission baseline. It is inappropriate to use a more recent baseline for determining whether a unit is subject to BART. States must determine baseline visibility conditions for Class I areas using data on emissions from 2000-2004. 40 C.F.R. § 51.308(d)(2)(i). All of the emission limits in a haze SIP, including the BART limits, are designed to meet the goal of making reasonable progress toward natural visibility conditions at each Class I area. 42 U.S.C. § 7491(b)(2). Thus, it makes little sense to calculate the goal based on 2000-2004 emissions, but then calculate the emission limits to meet that goal using a different baseline. For these reasons, we urge LDEQ to reanalyze whether the unit is subject to BART based on the use of a 2000-2004 emissions baseline.

In addition, we urge LDEQ to clarify the basis for the SO2 limit in the proposed Administrative Order. It is unclear from the record how LDEQ arrived at the limit; in particular, it is unclear what baseline emissions were used and why, and it is similarly unclear what the basis for the new SO2 limit is. It appears that the SO2 limit in the Order of 29.275 tons per day is equal to the baseline emissions rate. Finally, if the emission limits in the Administrative Order are used to screen the unit out of BART or as BART, the Order must be included in the SIP and be federally enforceable. *See* 40 C.F.R. pt.58, App. Y § IV(D)(4)(d) ("When you project that future operating parameters . . . will differ from past practice, and if this projection has a deciding effect in the BART determination, then you must make these parameters or assumptions into enforceable limitations."); *id.* § V ("To complete the BART process, you must establish enforceable emission limits that reflect the BART requirements and require compliance within a given period of time.").

II. Louisiana's Proposed Reliance on CSAPR as a BART Alternative is Unlawful.

Louisiana's proposal to rely on ozone-season NOx reductions under CSAPR as an alternative to source-specific BART is unlawful for four reasons. First, Louisiana's proposal exempts sources from BART requirements without complying with the statutory prerequisites

for such an exemption. Second, even if EPA's "CSAPR Better than BART" rule could relieve Louisiana sources of the obligation to install BART controls, the Better than BART rule itself is fundamentally flawed. Third, the "Better than BART rule" is no longer valid given the substantial changes in CSAPR allocations and compliance deadlines.[5] Indeed, recent developments, including the D.C. Circuit's invalidation of certain state's emission allocations and the removal of Texas from the CSAPR trading program, have further undermined the Better than BART rule's analytical rationale. Finally, the application of CSAPR as a substitute for source specific BART is uniquely and particularly problematic in Louisiana because NOx emissions are only covered by CSAPR during the ozone season—less than half the year.

First, Louisiana's proposal is unlawful because it exempts sources from installing BART controls without going through the exemption process Congress prescribed. The visibility protection provisions of the Clean Air Act include a "requirement" that certain sources "install, and operate" BART controls. 42 U.S.C. § 7491(b)(2)(A). Congress specified the standard by which sources could be exempted from the BART requirements, which is that the source is not "reasonably [] anticipated to cause or contribute to a significant impairment of visibility" in any Class I area. *Id.* § 7491(c)(1). Appropriate federal land managers must concur with any proposed exemption. *Id.* § 7491(c)(3). Neither EPA nor Louisiana has demonstrated that the Louisiana EGUs subject to BART meet the standards for an exemption. Nor has EPA or the state obtained the concurrence of federal land managers. Therefore, Louisiana must require source-specific BART for each power plant subject to BART.

Second, even if Louisiana could use a BART alternative without going through the statutory exemption process, the state cannot rely on CSAPR because of flaws in the rule that purport to show that CSAPR makes more reasonable progress than BART (the "Better than BART" rule). EPA's regulations purport to allow the use of an alternative program in lieu of source-specific BART only if the alternative makes "greater reasonable progress" than would BART. 40 C.F.R. § 51.308(e)(2). To demonstrate greater reasonable progress, a state or EPA must show that the alternative program does not cause visibility to decline in any Class I area and results in an overall improvement in visibility relative to BART at all affected Class I areas. *Id.* § 51.308(e)(3)(i)-(ii). Here, EPA claims that its 2012 "Better than BART" rule demonstrated that CSAPR achieves greater reasonable progress than BART. *See* 77 Fed. Reg. 33,642.

As we explained in detail in our 2011 and 2012 comments, EPA compared CSAPR to BART in the Better than BART rule by using CSAPR allocations that are more stringent than now required as well as by using presumptive BART limits that are less stringent than required under the statute. *See* Letter from McCrystie Adams, Earthjustice to EPA at 13-16 (Feb. 28, 2012). These assumptions tilted the scales in favor of CSAPR. It would be arbitrary and

[5] As explained in detail in the attached briefing regarding the still-pending litigation challenging EPA's "Better than BART" rule, the better than BART rule not only fails to meet the Clean Air Act's statutory requirements for a BART exemption, but fails to account for the geographic and temporal uncertainties in emissions reductions under CSAPR. Sierra Club also submits and incorporates our February 28, 2011 comments, our supplemental March 27, 2012 comments on the Better than BART, which are relevant to EPA's proposal to rely on CSAPR as a BART alternative. *See* Ex. 4, Conservation Groups' Opening Brief, *Utility Air Regulatory Group v. U.S. Environmental Protection Agency*, No. 12-1342, ECF Doc. 1636773 (D.C. Cir. filed Sept. 20, 2016); *see also* Exs. 1 & 2.

capricious for EPA to rely on such an inaccurate, faulty comparison to conclude that CSAPR will achieve greater reasonable progress than will BART. Even under EPA's skewed comparison, CSAPR achieves barely more visibility improvement than BART at the Breton and Caney Creek National Wilderness Areas. If EPA had modeled accurate BART limits and up-to-date CSAPR allocations, then EPA would likely find that CSAPR would lead to less visibility improvement than BART.

Moreover, EPA's "CSAPR is better than BART" determination fails to account for the inherent uncertainties in emissions reductions under CSAPR. BART is a technology that must be installed and operated year-round, and a corresponding emission limit that must also be met year-round. BART emissions limits must be met on a continuous basis. *See* 42 U.S.C. § 7602(k); CAA § 302(k). By contrast, CSAPR allows trading of emissions allowances between sources, including between sources in difference states, rather than imposing a fixed emission limit for each source. EPA's assessment of CSAPR Better than BART does not and cannot assess the unknown impact of complex trading under CSAPR on the Class I areas affected by Louisiana sources.

Third, EPA cannot lawfully rely on the "Better than BART" rule because the rule is based on a version of CSAPR that no longer exists. Accordingly, any conclusion that EPA made in the 2012 Better than BART rule regarding whether CSAPR achieves greater reasonable progress than BART is no longer valid. Since 2012, EPA has significantly changed the allocations and the compliance deadlines for CSAPR. Of particular relevance here, after 2012, EPA increased the total ozone season CSAPR allocations for every covered EGU in Louisiana. 77 Fed. Reg. 34830, 34835 (June 12, 2012). EPA also extended the compliance deadlines by three years, such that the phase 1 emissions budgets take effect in 2015-2016 and the phase 2 emissions budgets take effect in 2017 and beyond. 79 Fed. Reg. 71663, 74853.

In addition to EPA's increased emissions budgets and extended compliance timeline, the D.C. Circuit's decision in *EME Homer City Generation v. EPA*, 795 F.3d 118, 130-32 (D.C. Cir. 2015), which invalidated the SO_2 or NOx emission budgets for fourteen states, has fundamentally undermined the rationale underlying EPA's Better than BART rule. Specifically, the Court invalidated the 2014 SO_2 emission budgets for Alabama, Georgia, South Carolina, and Texas, and the 2014 NOX emission budgets for Florida, Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Texas, Virginia, and West Virginia. *Id.* at 124. As explained in our initial brief in the still-pending challenge to the CSAPR Better than BART rule, the effect of *Homer City* is to pull the rug out from under EPA's BART exemption rule. EPA's finding that CSAPR would produce better visibility improvement than BART was premised on the existence of all the state-specific emission budgets adopted in the Transport Rule. Because the D.C. Circuit has now invalidated many of those budgets, the BART exemption rule is left without the factual basis on which it relied.

In short, Louisiana purports to satisfy the regulatory requirements for a BART alternative by relying ozone-season budgets for NOx that no longer exist. To rely on CSAPR as an alternative to BART, Louisiana must demonstrate that the version of CSAPR that is now in effect, and will be in effect at the time of the final rule, makes greater reasonable progress than BART. Having failed to make that demonstration, Louisiana has not met its burden to show that

CSAPR will achieve greater reasonable progress than source-specific BART. *See* 40 C.F.R. § 51.308(e)(2), (3). More troubling, Louisiana's reliance on the CSAPR Better than BART rule fails to account for, or even mention, the very real possibility that CSAPR or the Better than BART rule will not exist in any form when the rule is finalized.

Finally, Louisiana's reliance on CSAPR Better than BART is unlawful because the emissions reductions achieved by CSAPR in Louisiana are limited to five months of the year—the ozone season. Given that any controls that might be installed to meet CSAPR are not required to be operated year-round, CSAPR does nothing to protect the affected Class I areas during the remaining seven months of each year. In fact, as noted in EPA's Technical Support Document and in the National Park Service's comments on EPA's proposed disapproval of the 2008 SIP, the adverse impacts of Louisiana NOx emissions on visibility are highest in the winter months—*i.e.*, outside of the ozone season.[6] Thus, NOx emissions reductions that are effective only during the ozone season will not address the visibility impact due to wintertime ammonium nitrate at Breton Island or other Class I areas in neighboring states.

Even within the five month ozone season, CSAPR allows for temporal variability such that a facility could emit at high levels within a shorter time period, creating higher than anticipated visibility impacts. Because of the high degree of variability and flexibility, power plants may exercise options that would lead to little or no emission reductions. For example, a facility in Louisiana might purchase emission credits from a source beyond the air shed of the Class I area the Louisiana source impairs. Because CSAPR requirements only pertain to the Louisiana source for a fraction of the year, that source may be even more incentivized to purchase emission credits from elsewhere than a source in a fully covered CSAPR state. Thus, without knowing which Louisiana EGUs will reduce pollutants by what amounts under CSAPR, or when they will do so, and because these emissions reductions are applicable for less than half the year, Louisiana simply cannot know the impact of CSAPR upon Breton and other affected Class I areas.

For these reasons, reliance on CSAPR to satisfy the NOx BART requirements is unlawful, and Louisiana should include source-specific NOx BART determinations in the final SIP.

III. Louisiana's Proposed SIP Revision Fails to Satisfy the Regional Haze Program's Reasonable Progress Requirements.

The draft SIP violates the long-term strategy and reasonable progress requirements in several ways. First, the draft SIP fails to calculate reasonable progress goals for Louisiana's Class I area, Breton National Wildlife Refuge. Second, the SIP fails to consider whether controls at non-BART sources would ensure that reasonable progress is made toward eliminating haze at Breton and other Class I areas. As a result of these flaws, the State failed to examine controls at some of the largest non-BART sources in the State, such as Dolet Hills, which contribute

[6] *See* Ex. 5, National Park Service Comments, EPA Docket No. EPA–R06–OAR–2008–0510-0017; *see also* Ex. 6 at A-40 through A-42, EPA, Technical Support Document Appendix A, Modeling and Emission Inventory Development; Review and Analysis for Louisiana's Regional Haze State Implementation Plan Submittal, EPA Docket No. EPA–R06–OAR–2008–0510-0006.

significantly to haze. For these reasons, the SIP's long-term strategy is not approvable.

One of the main features of the Regional Haze Rule is the establishment of "goals (expressed in deciviews)[7] that provide for reasonable progress towards achieving natural visibility conditions." 40 C.F.R. § 51.308(d)(1). In developing these "reasonable progress goals" and the emission reductions needed to meet them, the state must consider four factors: (1) the costs of compliance, (2) the time necessary for compliance, (3) the energy and non-air quality environmental impacts of compliance, and (4) the remaining useful life of any potentially affected sources. 42 U.S.C. § 7491(g)(1); 40 C.F.R. § 51.308(d)(1)(i)(A), (d)(3). After considering these factors, each regional haze implementation plan must then include emission limits, schedules of compliance, and "all measures necessary" to make reasonable progress towards achieving natural visibility conditions. 40 C.F.R. § 51.308(d)(3)(ii). Given the statutory goal to eliminate all haze caused by "manmade air pollution," 42 U.S.C. § 7491(a)(1), states are required to consider *all* air pollution sources that contribute to impairment in Class I areas. *See* 40 C.F.R. § 51.308(d)(3)(iv) (in developing the long-term strategy, "[t]he State should consider major and minor stationary sources, mobile sources, and area sources.").

For each Class I area within its borders, a state must determine the uniform rate of progress ("URP"), which is the amount of progress that, if kept constant each year, would ensure that natural visibility conditions are achieved in 2064. 40 C.F.R. § 51.308(d)(1)(i)(B). If a state selects a reasonable progress goal that achieves a slower rate of progress than the URP, the state must demonstrate, based on the four reasonable progress factors, "that the rate of progress for the implementation plan to attain natural conditions by 2064 is not reasonable; and that the progress goal adopted by the State is reasonable." *Id.* § 51.308(d)(1)(ii). In setting RPGs, each state must also consult with nearby states to develop strategies and emission limits necessary to ensure reasonable progress toward the national goal in each Class I area that may be affected by the state's emissions. *Id.* § 51.308(d)(1)(iv).

Although states have discretion in setting RPGs, EPA has repeatedly and consistently taken the position that meeting the Uniform Rate of Progress is not a "safe harbor," and does not relieve the state of the obligation to consider reasonable progress.[8]

A. Louisiana Cannot Issue a Partial Regional Haze SIP Without Evaluating Reasonable Progress as a Whole.

Louisiana's proposed SIP revision fails to properly evaluate reasonable progress or to consider whether additional emission reductions (beyond BART for SO_2) may be necessary to ensure reasonable progress. As an initial matter, Louisiana cannot issue a BART SIP revision in isolation, and without evaluating the reasonable progress as a whole. The D.C. Circuit has

[7] A deciview is a measurement of visibility impairment. A deciview is a haze index derived from calculated light extinction, such that uniform changes in haziness correspond to uniform incremental changes in perception across the entire range of conditions, from pristine to highly impaired. 40 C.F.R. § 51.301.

[8] *See, e.g.*, 64 Fed. Reg. 35732 (preamble to the Regional Haze Rule);77 Fed. Reg. at 11847 (noting that states are "required to do more than establish RPGs that meet or exceed the URP"); 81 Fed. Reg. 66332, 66361 (Sept. 27, 2016) (final Arkansas Regional Haze Federal Implementation Plan.

explained that the overarching mandate of the Clean Air Act and the Regional Haze Rule is a state-wide regional haze plan that achieves reasonable progress toward the 2064 natural visibility goal. *Util. Air Regulatory Group*, 471 F.3d 1333, 1340 (D.C. Cir. 2006); *Ctr. for Energy and Econ. Dev. v. EPA,* 398 F.3d 653, 660 (D.C. Cir. 2005). To meet the 2064 goal, a regional haze plan must include two critical components: BART limits ***and*** a long-term strategy to achieve reasonable progress toward that goal. 42 U.S.C. § 7491 (b)(2)(A) & (b)(2)(B); 40 C.F.R. § 51.308(d)(1), (d)(3), (e); *see also* 42 U.S.C. § 7491 (b)(2). In order to set the reasonable progress goals in the long-term strategy, the state must, among other things, determine a "uniform rate of progress" required to meet that goal. 40 C.F.R. § 5 1.308(d)(1)(B). As EPA noted in its final disapproval of the 2008 SIP, Louisiana's progress goals are "slightly slower than the URP." EPA 2008 TSD at 39. Yet, the state fails to demonstrate, based on the factors in 40 CFR 51.308(d)(1)(i)(A), that the uniform rate of progress for the SIP to attain natural conditions by 2064 is not reasonable; and that the progress goal adopted by it is reasonable. 40 C.F.R. § 51.308(d)(1)(ii).

Moreover, Louisiana has failed to account for how, in the absence of relied upon SO_2 reductions no longer required under CAIR and without any additional reductions from BART sources, it will maintain its anticipated rate of progress. Nor does the state explain how ozone-season-only NOx reductions under CSAPR could achieve greater reasonable progress than source specific BART. Absent a uniform rate of progress calculation, long- term strategy, or reasonable progress goals, Louisiana's SIP revision is deficient on its face and cannot be approved by EPA.

All required components of a Regional Haze SIP affect each other, are part of a "single administrative action," and must be evaluated together to determine compliance with the Clean Air Act and Regional Haze Rule. Louisiana's failure to comprehensively consider the proposed alternative BART program under CSAPR, SO_2 BART for EGUs, the long-term strategy, and reasonable progress goals together in a single SIP violates the Clean Air Act and Regional Haze Rule and is arbitrary and capricious.

B. Louisiana Must Consider Reasonable Progress Controls for All Louisiana EGUs, Whether Subject to BART or Not.

In its final disapproval of Louisiana's 2008 Regional Haze submittal, EPA concluded that the state's long term strategy and its reasonable progress goals were deficient because Louisiana's reasonable progress goals were impermissibly linked to the invalidated CAIR rule. 77 Fed. Reg. at 39428 (final disapproval discussing deficiencies); 77 Fed. Reg. at 11847 (proposed disapproval); *see* 77 Fed. Reg. 33642 (final disapproval of Regional Haze SIPs, including Louisiana, that relied on CAIR better than BART rule); *see also* Ex. 7, EPA Technical Support Document at 33. Because Louisiana's SIP failed to reflect appropriate emissions from BART, EPA concluded that the state would be required to reconsider its reasonable progress goals. Moreover, EPA concluded that Louisiana would "have to consider whether EGUs previously covered by CAIR, *whether subject to BART or not*, should be controlled to ensure reasonable progress." 77 Fed. Reg. at 39427; 77 Fed. Reg. at 11847 (emphasis added).

Despite EPA's clear admonition to reconsider reasonable progress, and contrary to the plain requirements of the Regional Haze Rule itself, Louisiana's SIP revision fails to evaluate whether additional emission reductions from non-BART sources would be reasonable, or are necessary to make reasonable progress toward the national visibility goal. 77 Fed. Reg. 39427; 77 Fed. Reg. 11847. In particular, the revised SIP fails to evaluate (or even mention) one of largest sources of visibility-impairing SO_2 and NOx emissions in the state—Cleco Power's lignite-fired Dolet Hills Power Station. Given that Dolet Hills consistently ranks as one of the largest emitters of SO2 and NOx in the state, that Louisiana's and given EPA's unequivocal finding that Louisiana must reevaluate controls for all EGUs, "*whether subject to BART or not*," 77 Fed. Reg. 39427; 77 Fed. Reg. 11847 (emphasis added), Louisiana's failure to consider reasonable progress controls for Dolet Hills renders its proposed SIP unapprovable. *See* Ex. 7. Louisiana's failure to consider reasonable progress controls for Dolet Hills is especially problematic given that the state has *not* demonstrated that it is meeting the Uniform Rate of Progress and that the proposed SIP revision fails to require any emission reductions from BART-eligible sources.

Applying the commonly used Q/D analysis, Dolet Hills would almost certainly be identified as requiring additional source-apportionment modeling. EPA, states, and regional planning organizations have historically used a Q/D analysis to identify facilities that have the potential to impact visibility at a Class I area based on their emissions and distance to the Class I area. Q is the annual emissions in tons per year (tpy). D is the nearest distance to a Class I Area in kilometers (km). Using this approach, EPA and the states, generally require additional modeling for any source that has a Q divided by D threshold of 10 or more.[9]

As shown in the table below, using Dolet Hills' average annual SO2 and NOx emissions from 2000-2016,[10] it easily meets the Q/D threshold for additional modeling based on its proximity to either Breton National Wilderness Area or Caney Creek National Wilderness Area. Accordingly, Louisiana should conduct source-apportionment modeling to determine Dolet Hills' visibility impacts to both Class I areas.

Site	State	Latitude	Longitude	Distance to Dolet Hills	Average Annual SO2 (tpy)	Q/D	Average Annual NOx (tpy)	Q/D
Breton	LA	29.1189	-89.2066	500km	17,907	35.8	7,195	14.39

[9] *See* 40 CFR part 51, App. Y, § III (How to Identify Sources "Subject to BART"):

> Based on our analyses, we believe that a State that has established 0.5 deciviews as a contribution threshold could reasonably exempt from the BART review process sources that emit less than 500 tpy of NOx or SO2 (or combined NOx and SO2), as long as these sources are located more than 50 kilometers from any Class I area; and sources that emit less than 1000 tpy of NOx or SO2 (or combined NOx and SO2) that are located more than 100 kilometers from any Class I area.

Id. This approach corresponds to a Q/D threshold of ten.

[10] *See* Ex 8 (EPA Air Market Data for Dolet Hills), available at https://ampd.epa.gov/ampd/

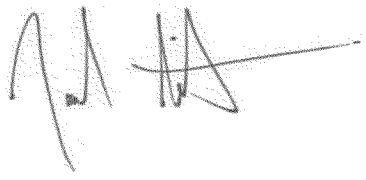
Caney Creek	AR	34.4544	-94.1429	263km	17,907	68.08	7,195	27.35

Moreover, using a publicly available costing mechanism from EPA (designed by Sargent & Lundy),[11] it appears that the installation of a full wet FGD at Dolet Hills would be well within the range of costs that EPA has previously found to be cost-effective. EPA's costing mechanism estimates that a full wet scrubber would have a capital cost of $341 million. Based on a conservative estimate of 95% SO2 removal efficiency, a full wet scrubber at Dolet Hills would remove approximately 17,011 tons per year of SO2 at a dollar per ton cost of just $2,323.[12] Thus, had the state evaluated the reasonable progress factors for Dolet Hills, as required by the Regional Haze Rule, it is likely that additional emission reductions from the 640 megawatt lignite-fired power plant would be warranted and cost-effective.

IV. Conclusion

Thank you for the opportunity to submit these comments. We respectfully request that LDEQ revise its proposed SIP to address the flaws outlined above. Please do not hesitate to contact us with any questions or to discuss the matters raised in these comments.

Sincerely,



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[11] *See* EPA, "Documentation for EPA Base Case v.4.10" for the Proposed Transport Rule, *available at* http://www.epa.gov/airmarket/progsregs/epa-ipm/BaseCasev410.html
[12] *See* Ex. 9, Dolet Hills Scrubber Cost Estimate.